

Remarks/Arguments

Claims 2-11 and 15-22 stand rejected under 35 USC 102(b) as anticipated by or, in the alternative, under 35 USC 103(a) as obvious over Harandi (5,019,357). Claims 13 and 14 stand rejected under 35 U.S.C. 103(a) as obvious over Harandi. Applicants note that claim 12 is not rejected on the basis of prior art, and thus should be allowable. However, the Examiner has not indicated claim 12 to be allowable in the Office Action Summary or Detailed Action. Applicants reserve the right to place claim 12 in independent form (as depending from claim 18 prior to any amendments herein) should the Examiner deem claim 12 so allowable in a subsequent office action.

Applicants respectfully submit that claims 2-22 are patentable over Harandi, which is drawn to a two-stage oligomerization process in contrast to Applicants' process for catalytic hydrotreating oligomerization products. Specifically, Harandi feeds light alkenes (e.g., C₃-C₄) to a primary stage reaction zone to produce intermediate oligomers (e.g., C₅-C₉), which in turn are fed to a secondary stage reaction zone to undergo further oligomerization to produce heavier oligomers (e.g., C₁₀⁺) (see e.g., abstract and col. 1, lines 10-20). Harandi teaches that the two-stage process is beneficial in that the majority of the heat of reaction is released in the primary reactor, which reduces overall unit cost (see col. 11, lines 15-28). While it appears that the primary focus of Harandi is the production of distillate range hydrocarbons for motor fuels, Harandi does teach that the process is useful to produce lubricants (see e.g., col. 2, lines 30-31).

In contrast to the two-stage oligomerization process of Harandi, Applicants catalytically hydrotreat an oligomerization product to improve the properties thereof (see e.g., page 4, lines 11-13). That is, Applicants take a synthetic lubestock (such as that produced by the secondary stage of Harandi) and subject it to further treatment, namely hydrotreating with zeolite catalyst.

Applicants have amended claim 18 to recite that the oligomerization product is contacted with a zeolite catalyst system in the presence of hydrogen, as supported, for example, on page 13, line 8.

The Examiner relies upon the second stage of Harandi as anticipating and/or making obvious Applicants' claimed process. However, as explained above, the second stage of Harandi is a second oligomerization step to further oligomerize an intermediate hydrocarbon to a heavier hydrocarbon, in contrast to Applicants' claimed catalytic hydrotreating process. To further illustrate the differences, Applicants' claimed process hypothetically could be used in conjunction with Harandi by feeding a portion of the heavier hydrocarbon oligomers from the secondary stage of Harandi to Applicants' catalytic hydrogenation process to improve the properties thereof. Given that Harandi does not teach or suggest the recited process for catalytic hydrotreating an oligomerization product, Applicants respectfully submit that claims 2-22 are in condition for allowance.

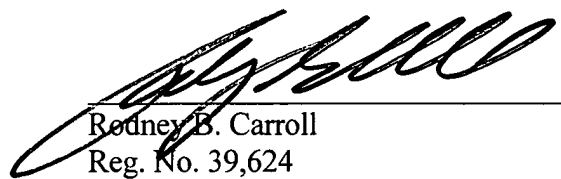
Applicants respectfully submit that the present application is in condition for allowance. If the Examiner has any questions or comments or otherwise feels it would be helpful in expediting the application, he is encouraged to telephone the undersigned at (972) 731-2288.

The Commissioner is hereby authorized to charge payment of any fee associated with this communication to Deposit Account No. 50-1515.

Respectfully submitted,
CONLEY ROSE, P.C.

Date: 6-3-03

5700 Granite Parkway, Suite 330
Plano, Texas 75024
Telephone: (972) 731-2288
Facsimile: (972) 731-2289


Rodney B. Carroll
Reg. No. 39,624

ATTORNEY FOR APPLICANT